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DATE MAILED: 08/27/2010

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

22652	7500	08/27/2010	

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP

901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413 EXAMINER

NG, FAN

ART UNIT PAPER NUMBER

2471

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,993	02/02/2006	Marco Areddu	09952,0021	2598

TITLE OF INVENTION: METHOD FOR THE STATISTICAL ESTIMATION OF THE TRAFFIC DISPERSION IN TELECOMMUNICATION NETWORK

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 11/29/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This f appropriate. All further c indicated unless correcter maintenance fee notificati	form should be used for orrespondence includir d below or directed oth ons.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a					should be completed where correspondence address as arate "FEE ADDRESS" for
CURRENT CORRESPONDED	NCE ADDRESS (Note: Use Bi	ock I for	any change of address)	F	ote: A certificat ee(s) Transmittal apers. Each addi	e of mail . This certional particate of r	ing can only be used for tilicate cannot be used a ser, such as an assignmentalling or transmission.	or domestic mailings of the for any other accompanying ent or formal drawing, must
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Wildling Tory	DC 20001-413							(Depositor's name)
				F				(Signature)
				L				()
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		AT	IORNEY DOCKET NO.	CONFIRMATION NO.
10/566,993 TITLE OF INVENTION NETWORK	02/02/2006 N: METHOD FOR T	HE ST	FATISTICAL EST	Marco Areddu ITMATION OF THE	TRAFFIC DIS	PERSION	09952.0021 N IN TELECOMMUN	2598 ICATION
APPLN. TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID	SSUE FEI	E TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300	\$0		\$1810	11/29/2010
EXAMI	NER		ART UNIT	CLASS-SUBCLASS	7			
NG, F	AN		247I	370-351000	_			
"Fee Address" indic PTO/SB/47; Rev 03-02 Number is required.  3. ASSIGNEE NAME AN	ndence address (or Cha 7122) attached. cation (or "Fee Address c or more recent) attach TO RESIDENCE DATA sss an assignce is ident in 37 CFR 3.11. Com	nge of 'Indica ed. Usa	Correspondence ation form e of a Customer		to 3 registered litively, gle firm (having ragent) and the torneys or agent be printed.  type)  patent. If an aum assignment.	as a men names of s. If no n	mber a 2 i up to ame is 3	locument has been filed for
Please check the appropria	ate assignee category or	catego	ries (will not be pr	inted on the patent):	Individual [	Corpor	ation or other private gr	oup entity 🚨 Government
Advance Order - #	o small entity discount p		ed)	A check is enclosed Payment by credit	L card. Form PTO- by authorized to	2038 is a	ne required fee(s), any de	
<ol> <li>Change in Entity State</li> <li>a. Applicant claims</li> </ol>	as (from status indicated SMALL ENTITY state			☐ b. Applicant is no I	onger claiming S	MALLE	NTITY status. Sec 37 C	FR 1.27(g)(2).
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if req ecords of the United Sta	iired) v tes Pat	will not be accepted ent and Trademark	from anyone other that Office.	n the applicant; a	registere	d attorney or agent; or t	he assignee or other party in
Authorized Signature _					Date			
Typed or printed name					Registrat			
This collection of informa an application. Confidenti submitting the completed this form and/or suggestio Box 1450, Alexandria, Vir Alexandria, Virginia 2231	tion is required by 37 C ality is governed by 35 application form to the ons for reducing this bur rginia 22313-1450. DC 3-1450.	FR 1.3 U.S.C. USPT den, sl NOT	11. The information 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR O.	on is required to obtain on 1.14. This collection is depending upon the in the Chief Information Off COMPLETED FORMS	r retain a benefit estimated to take fividual case. An icer, U.S. Patent TO THIS ADDI	by the po 12 minu ny commo and Trad RESS. SE	ablic which is to file (an tes to complete, includi- ents on the amount of ti- lemark Office, U.S. Dep ND TO: Commissioner	d by the USPTO to process) ag gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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22852 75	590 08/27/2010	EXAMINER				
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER			NG, FAN			
LLP			ART UNIT	PAPER NUMBER		
901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			2471 DATE MAILED: 08/27/201	0		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 499 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 499 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

#### Application No. Applicant(s) 10/566 993 AREDDU ET AL. Notice of Allowability Examiner Art Unit Fan Na 2471 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 04/30/2010. 2. The allowed claim(s) is/are 23-44. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) \( \subseteq \text{Some\* c} \) \( \subseteq \text{None of the:} \) 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance

/F. N./ Examiner, Art Unit 2471

of Biological Material

9. ☐ Other .

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#### DETAILED ACTION

#### **EXAMINER'S AMENDMENT**

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

 a. Authorization for this examiner's amendment was given in a telephone interview Bruce Bower on 08/09/2010.

The application has been amended as follows:

#### In the claim:

Claim 33 (Current amendment) A system for evaluating traffic dispersion in a communications network, comprising:

at least one exchange being arranged for applying a set of routing rules for selectively allotting incoming traffic directed toward a given destination to a plurality of links:

a measuring module <u>interactively coupled to a computer within the system</u>
for measuring the volume of said incoming traffic directed toward said given destination;

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an evaluation module interactively coupled to the computer within the system and independent from the at least one exchange and nodes of the communications network, wherein the evaluation module

incrementally generates traffic quantums representative of said traffic, based on receiving, at the evaluation module as an input directly from the at least one exchange, a measured traffic volume of said incoming traffic directed towards a given destination,

analyzes said set of routing rules generated by the at least one exchange, and

produces a distribution of said traffic quantums over said links in said plurality, the distribution thus obtained being statistically representative of the dispersion of said incoming traffic over said plurality of links at said exchange.

# Claim 35 (Currently Amended) The system of claim 33, wherein:

the measuring module is configured for determining, for each link in said plurality, a number of call attempts and a corresponding number of seizures, the system further comprising:

a routing rules generating module <u>interactively coupled to the computer</u>
<u>within the system</u> for setting a load limit for applying said set of routing rules, said
routing rules generating module being configured for:

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if said number of call attempts equals said number of seizures, setting a load limit for applying said set of routing rules for said link equal to the number of circuits available in the link, and

if said number of call attempts is greater than said respective number of seizures, setting said load limit equal to the outgoing traffic volume measured by said measuring module on said link.

Claim 36 (Currently Amended) The system of claim 33, comprising a routing rules generating module interactively coupled to the computer within the system configured for:

accepting said traffic quantums to be assigned to a given link only if the sum of all the traffic portions assigned to said link is smaller than said load limit set for said link,

otherwise selecting a next choice in said set of routing rules.

Claim 40 (Currently Amended) The system of claim 39, wherein said at least one valuation evaluation module is configured for:

analysing the traffic volume ( $TV_{loxy}$ ) directed toward a given destination within said network and carried by a respective link coming out of said first exchange; and

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 $\label{eq:component} \mbox{determining a first component of said traffic volume (TV_{ksy}) coming from \\ \mbox{said second exchange as}$ 

$$TV_{kxy, m} = \frac{TV_{mxp} \times TV_{kxy}}{\sum\limits_{\delta}^{VCG \in \Delta} TV_{kx\delta}}$$

wherein  $\boldsymbol{\Delta}$  is the subset of links used by a current routing rule in said first exchange.

#### Allowable Subject Matter

#### 2. Claims 23-44 are allowed.

The following is an examiner's statement of reasons for allowance: The claims are allowed for at least the reasons as set forth on page 13-16 of applicant's response filed 04/30/2010, prior art of record does not disclose, in single or in combination of:

Claims 23, 33 recited ... analyzing, at the evaluation module, said set of routing rules generated by the at least one exchange ... in combination with other limitations recited as specified in claims 23, 33.

The closet prior art <u>Kroboth et al. (2004/0037230)Watanabe et al.</u> discloses an A system to collect heterogeneous scalar measurement data over a network from a plurality of devices connected to the network, and normalize the collected

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heterogeneous scalar measurement data. The transformed scalar measurement data is displayed in graphical representations such that transformed scalar measurement data from a particular network device can be displayed alongside a graphical representation of a transformed scalar measurement data from a different particular network device. Thus, transformed scalar measurement data from different heterogeneous network devices can be aggregated and displayed in the same graphical representation, but Kroboth failed to disclose analysis a set of routing rules.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fan Ng whose telephone number is (571) 270-3690. The examiner can normally be reached on Monday-Friday; 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. N./ Examiner, Art Unit 2471 /Chi H Pham/ Supervisory Patent Examiner, Art Unit 2471